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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/220,736	12/23/98	BOHN	D 10971957-1

022879 MM92/1212
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INTELLECTUAL PROPERTY ADMINISTRATION
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EXAMINER	
LUU, T	
ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 12/12/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/220,736	BOHN, DAVID D.	
	Examiner	Art Unit	
	Thanh X Luu	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15)☒ Notice of References Cited (PTO-892)
16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18)☐ Interview Summary (PTO-413) Paper No(s). _____ .
19)☐ Notice of Informal Patent Application (PTO-152)
20)☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Matsunami et al. (U.S. Patent 5,022,725) or Thomson (U.S. Patent 3,825,747).

Regarding claims 1 and 8, Matsunami et al. disclose (see Figure 1) an optical system for forming an image of at least a portion of an illuminated area on an object, the illuminated area being characterized by at least one brightly illuminated region and at least one less brightly illuminated region (not shown), comprising: a lens (5) or lens means positioned a spaced distance from the illuminated area on the object, the lens having an image side focal plane; an aperture stop (7) or telecentric aperture stop positioned so that it is substantially co-planar with the image side focal plane of the lens; and an occluding element (9) or an occluding means that blocks a predetermined amount of light from the brightly illuminated region but does not substantially block light from the less brightly illuminated region.

Thomson discloses (see Figure 5) an optical system for forming an image of at least a portion of an illuminated area on an object, the illuminated area being

characterized by at least one brightly illuminated region (10) and at least one less brightly illuminated region (24, Figure 1), comprising: a lens (14) or lens means positioned a spaced distance from the illuminated area on the object, the lens having an image side focal plane; an aperture stop (not labeled) or telecentric aperture stop positioned so that it is substantially co-planar with the image side focal plane of the lens; and an occluding element (20) or an occluding means that blocks a predetermined amount of light from the brightly illuminated region but does not substantially block light from the less brightly illuminated region.

Regarding claim 9, Matsunami et al. disclose (see Figure 1) a method of forming an image of at least a portion of an illuminated area on an object, the illuminated area being characterized by at least one brightly illuminated region and at least one less brightly illuminated region, comprising: positioning a lens (5) spaced a distance from the illuminated area on the object (not shown), the leans having an image side focal plane; positioning an aperture stop (7) at about the image side focal plane of the lens; and blocking (9) a predetermined amount of light from the brightly illuminated region before the light from the brightly illuminated region is refracted by the lens.

Thomson discloses (see Figure 5) a method of forming an image of at least a portion of an illuminated area on an object, the illuminated area being characterized by at least one brightly illuminated region and at least one less brightly illuminated region, comprising: positioning a lens (14) spaced a distance from the illuminated area on the object, the leans having an image side focal plane; positioning an aperture stop (not labeled) at about the image side focal plane of the lens; and blocking (20) a

predetermined amount of light from the brightly illuminated region before the light from the brightly illuminated region is refracted by the lens.

Regarding claim 2, Matsunami et al. disclose (see Figure 1) the occluding means (9) is disposed adjacent the object side of the lens. Thomson discloses (see Figure 5) the occluding means (20) disposed adjacent to the object side of the lens.

Regarding claim 3, Matsunami et al. disclose (see Figure 1) the occluding element comprising an opaque material deposited on the object side of the lens. Thomson discloses (see Figure 5) the occluding element comprising an opaque material deposited on the object side of the lens.

Regarding claim 7, the occluding element of Matsunami et al. is inherently substantially circular in shape since the lens is spherical. Thomson discloses (see Figure 4) the occluding element (20) substantially circular in shape.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4-6 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Matsunami et al. or Thomson.

Regarding claims 10 and 17, the apparatus of Matsunami et al. and Thomson produce a electrical signal as a result of detection of a light. Matsunami et al. and

Thomson do not disclose the electrical signal as a navigation signal and the light as a navigation light. However, it would require only routine skill in the art to apply the signal of the apparatus of Matsunami et al. or Thomson to any type of device. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide navigation signals from a navigation light for a navigation system in order to obtain a desired result.

Regarding claims 4-6 and 13-15, Matsunami et al. and Thomson disclose the occluding element deposited on the lens. Matsunami et al. and Thomson do not disclose a window positioned between the object side of the lens and the illuminated are on which the occluding element is deposited. However, it would require only routine skill in the art to deposit the occluding member a window instead of the lens. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to deposit the occluding member onto a window instead of the lens of Matsunami et al. or Thomson in order to reduce the costs and complexity of depositing on a lens. Further, deposition on a window allows a variety of occluding elements to be used without replacing the entire lens arrangement.

Regarding claim 11, Matsunami et al. and Thomson disclose (see Figure 1 and Figure 5, respectively) the occluding means (9) is disposed adjacent the object side of the lens.

Regarding claim 12, Matsunami et al. disclose and Thomson (see Figure 1 and Figure 5, respectively) the occluding element comprising an opaque material deposited on the object side of the lens.

Regarding claim 16, the occluding element of Matsunami et al. is inherently substantially circular in shape since the lens is spherical. Thomson discloses (see Figure 4) the occluding element (20) substantially circular in shape.

Response to Arguments

5. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (703) 305-0539. The examiner can normally be reached on Monday-Friday from 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seungsook Ham, can be reached on (703) 308-4090. The fax phone number for the organization where the application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl

December 5, 2000

Que T. Le
Primary Examiner